

## ABSTRACT OF THE DISCLOSURE

A system and method overlay of advanced digital technology onto the installed feeder and distribution cable portion of the outside plant to obtain additional voice circuits. Interface equipment proximate existing drop wire interface points converts digitized voice circuits back to analog signaling together with appropriate POTS signaling and power connections. The interface equipment is centrally powered along with other portions of the outside plant so that operation is independent of customer and commercial power sources. Power may be provided by batteries located at the associated central office or by locally provisioned, non-interruptible, battery-backed-up power sources. The existing switched telephone network includes central offices connected by interoffice facility trunks, each central office providing service to nearby subscribers connected by local loop facilities. These local loop facilities include a feeder/distribution system connecting the central offices to respective serving area interfaces and local drops connecting respective subscriber to the serving area interfaces. The capabilities of the feeder/distribution facilities are enhanced and expanded to accommodate additional subscribers by (re) configuring the feeder/distribution system to provide multiple digital subscriber lines between the central offices and the serving area interfaces or terminals using respective digital subscriber line circuits. The digital subscriber line circuits are terminated at respective Packet Voice Devices located at remote DSLAM terminals serving SAIs or mounted at serving terminals; and subscriber lines are assigned to individual channels of each of the digital subscriber line circuits.